

### REMARKS

Claims 1-12 and 14-19 are pending in the subject application.

#### A. Introduction

In the outstanding Office action, the Examiner rejected claims 11 and 12 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,993,314 to Lim et al. ("the Lim et al. reference") in view of U.S. Patent No. 5,929,716<sup>1</sup> to Komori et al. ("the Komori et al. reference") and U.S. Patent No. 5,821,820 to Snider et al. ("the Snider et al. reference"); rejected claim 13<sup>2</sup> under 35 U.S.C. § 103(a) as being unpatentable over the Lim et al. reference in view of U.S. Patent Application Publication No. 2003/0114129 to Jerng ("the Jerng reference"); and allowed claims 1-10 and 14-19.

#### B. Asserted Obviousness Rejection of Claims 11 and 12

In the outstanding Office action, the Examiner rejected claims 11 and 12 under 35 U.S.C. § 103(a) as being unpatentable over the Lim et al. reference in view of the Komori et al. reference and the Snider et al. reference. This rejection is respectfully traversed for at least the reasons set forth below.

As noted by the Examiner, the Lim et al. reference fails to disclose;

an LC resonance circuit including a voltage controlled oscillator including a varactor, an inductor and a capacitor, wherein a capacitance of the capacitor is adjusted using the control voltage provided by the phase locked loop to thereby change a resonance frequency of the LC resonance circuit.

*Office action mailed June 20, 2007, page 3.*

The Examiner then relies on the Komori et al. reference as disclosing an LC resonance circuit including an inductor and capacitor, and the Snider et al. reference as disclosing a varactor used to tune a resonator. The Examiner then concludes:

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<sup>1</sup> The Examiner confirmed the reference should read U.S. Patent No. 5,929,716 to Komori et al. in a June 29, 2007 telephone call.

<sup>2</sup> Claim 13 was canceled in the March 28, 2007 amendment

It would have been obvious to one of ordinary skill in the art to implement the LC resonance circuit architecture to the power amplifier for the transmitting portion of the Lim receiver in order to properly adjust the gain of the output signal and to operate at the correct frequency band and the varactor disclosed by Snider in order to tune the voltage controlled oscillator of Lim.

*Id.*

Claim 12 is similar to claim 11, with further limitations on the arrangement of the inductor and capacitor.

First, it is respectfully submitted that identifying the relevant teachings in the prior art is merely a first step towards a *prima facie* case of obviousness. As recently reaffirmed by the Supreme Court in *KSR Int'l Co. v. Teleflex Inc.*, "a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art."<sup>3</sup> Thus, in the instant application, the Examiner is obligated to provide some rationale for combining the particular elements disclosed in the three references. However, the Examiner has not done so.

In addition, the Examiner has failed to provide any objective evidence to support the assertion that one of ordinary skill in the art would find the missing subject matter obvious. As articulated by the U.S. Supreme Court in *Graham v. John Deere*, "the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved" (emphasis added).<sup>4</sup> The Supreme Court recently confirmed the particular importance of this aspect of *Graham* in *KSR*, stating,

Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit. See *In re Kahn*,

<sup>3</sup> *KSR Int'l Co. v. Teleflex Inc.* No. 04-1350 (U.S. April 30, 2007).

<sup>4</sup> *Graham v. John Deere*, 383 U.S. 1 (1966). See also MPEP 2141.03, which states, "'The importance of resolving the level of ordinary skill in the art lies in the necessity of maintaining objectivity in the obviousness inquiry,'" citing *Ryko Mfg. Co. v. Nu-Star, Inc.*, 950 F.2d 714, 718 (Fed. Cir. 1991).

441 F. 3d 977, 988 (CA Fed. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”).

(*KSR Int'l Co. v. Teleflex Inc.* No. 04-1350 (U.S. April 30, 2007)).

The Examiner has failed to provide any objective evidence as to the level of ordinary skill in the art at the time the application was filed. Accordingly, the Examiner has failed to meet the requirements established by *Graham* and reaffirmed by *KSR*. Therefore, the Examiner has failed to meet the basic requirements of a *prima facie* case of obviousness.

Finally, even assuming *arguendo* that the combination is proper, it is respectfully submitted that this combination of references does not disclose each and every element in the claims. For example, none of the references, either alone or in combination, disclose or suggest that a voltage input to an LC resonance circuit is the voltage provided by the phase locked loop, as recited in claims 11 and 12. At most, these references disclose that a voltage input to an LC resonance circuit may be a controlled voltage.

In view of the above, applicants respectfully submit that the Examiner has failed to set forth a *prima facie* case of obviousness. Accordingly, applicants respectfully submit that the rejection of claims 11 and 12, as well as claims 3-13 and 15-18 depending therefrom, is improper. Therefore, applicants respectfully request that this rejection be reconsidered and withdrawn.

C. Asserted Obviousness Rejection of Claim 13

In the outstanding Office action, the Examiner rejected claim 13 under 35 U.S.C. § 103(a) as being unpatentable over the Lim et al. reference in view of the Jerng reference. As this claim was cancelled in the March 28, 2007 amendment, this rejection is no longer applicable.

D. Allowed Claims 1-10 and 14-19

The indication that claims 1-10 and 14-19 are allowed is gratefully acknowledged. However, it is respectfully submitted that all of the claims are in condition for allowance.

Further, applicants note the Examiner's Statements of Reasons for Allowance that were provided with respect to claims 1-10 and 14-19 in the Office action, mailed June 20, 2007 (pages 6-13 therein). Applicants agree that the applied prior art fails to teach, inter alia, the subject matter identified by the Examiner in the Examiner's Statement of Reasons for Allowance. However, applicants respectfully submit that each of the allowed claims is patentable by merit of all of the subject matter recited therein, not merely the particular claim terms identified by the Examiner.

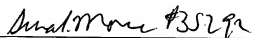
E. Conclusion

If the Examiner believes that additional discussions or information might advance the prosecution of the instant application, the Examiner is invited to contact the undersigned at the telephone number listed below to expedite resolution of any outstanding issues.

In view of the foregoing amendments and remarks, reconsideration of this application is earnestly solicited, and an early and favorable further action upon all the claims is hereby requested.

Respectfully submitted,  
LEE & MORSE, P.C.

Date: September 20, 2007

  
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PETITION and  
DEPOSIT ACCOUNT CHARGE AUTHORIZATION

This document and any concurrently filed papers are believed to be timely. Should any extension of the term be required, applicant hereby petitions the Director for such extension and requests that any applicable petition fee be charged to Deposit Account No. 50-1645.

If fee payment is enclosed, this amount is believed to be correct. However, the Director is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-1645.

Any additional fee(s) necessary to effect the proper and timely filing of the accompanying-papers may also be charged to Deposit Account No. 50-1645.